

I. GENERAL

THIS PROJECT INVOLVES INSTALLING A NEW PEDESTRIAN APS PUSH BUTTONS, COUNTDOWN PEDESTRIAN SIGNAL HEADS, POLES, CONDUITS, PAVEMENT MARKINGS, AND HANDBOXES FOR A SIDEWALK UPGRADE PROJECT. MD 501 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

II. INTERSECTION OPERATION

THE INTERSECTION OPERATES IN A NEMA THREE PHASE-OPERATION. FULLY ACTUATED MODE. THE MD 501 (CHILLUM ROAD) APPROACHES WILL OPERATE CONCURRENTLY. A SEPARATE PHASE FOR THE NORTHBOUND 19TH AVENUE APPROACH WILL BE PROVIDED.

III. PEDESTRIAN OPERATION

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTONS TO CROSS THE WEST AND SOUTH LEG OF THE INTERSECTION ARE TO BE PROVIDED. WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE:

SOUTH: "WAIT TO CROSS 19TH STREET AT CHILLUM ROAD, WAIT."  
WEST: "WAIT TO CROSS CHILLUM ROAD AT 19TH STREET, WAIT."

SPECIAL NOTES

1. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

DISTRICT

MR. VICTOR GRAFTON  
UTILITY ENGINEER  
301-513-7350

MS. FELECIA MURPHY (PG)  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
301-513-7358

MR. DUANE BERNARD  
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
301-513-7336

MR. VERNON STINNETT  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
301-513-7304

OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ED RODENHIZER  
MANAGER SIGNAL OPERATIONS  
410-787-7650

MR. EUGENE BAILEY  
MANAGER SIGN OPERATIONS  
410-787-7670

MS. DARLENE EIDE  
SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE)  
410-787-7668

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 18, 104.03 - 12, 104.03 - 10, 104.03 - 14.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY STATE HIGHWAY ADMINISTRATION

ITEM NO./CAT CODE	QUANTITY	DESCRIPTION
973023 SF 96		FLAT SHEET ALUMINUM SIGNS CONSISTING OF: D-3(1) DUAL FACED (16"XVAR.), MAST ARM MOUNT - 2 EACH ASSOCIATED SHIELD ASSEMBLY (30"X48"), POLE MOUNT - 1 EACH ASSOCIATED SHIELD ASSEMBLY (48"X72"), POLE MOUNT - 1 EACH R4-7(1) (18"X30"), WOOD POST MOUNT - 1 EACH M2-1 (21"X15"), WOOD POST MOUNT - 1 EACH M1-5 (30"X24"), WOOD POST MOUNT - 1 EACH W11-2 (30"X30"), WOOD POST MOUNT - 3 EACH W16-7P(L) (24"X12"), WOOD POST MOUNT - 1 EACH W16-7P(R) (24"X12"), WOOD POST MOUNT - 1 EACH W13-4(1) (36"X24"), WOOD POST MOUNT - 1 EACH

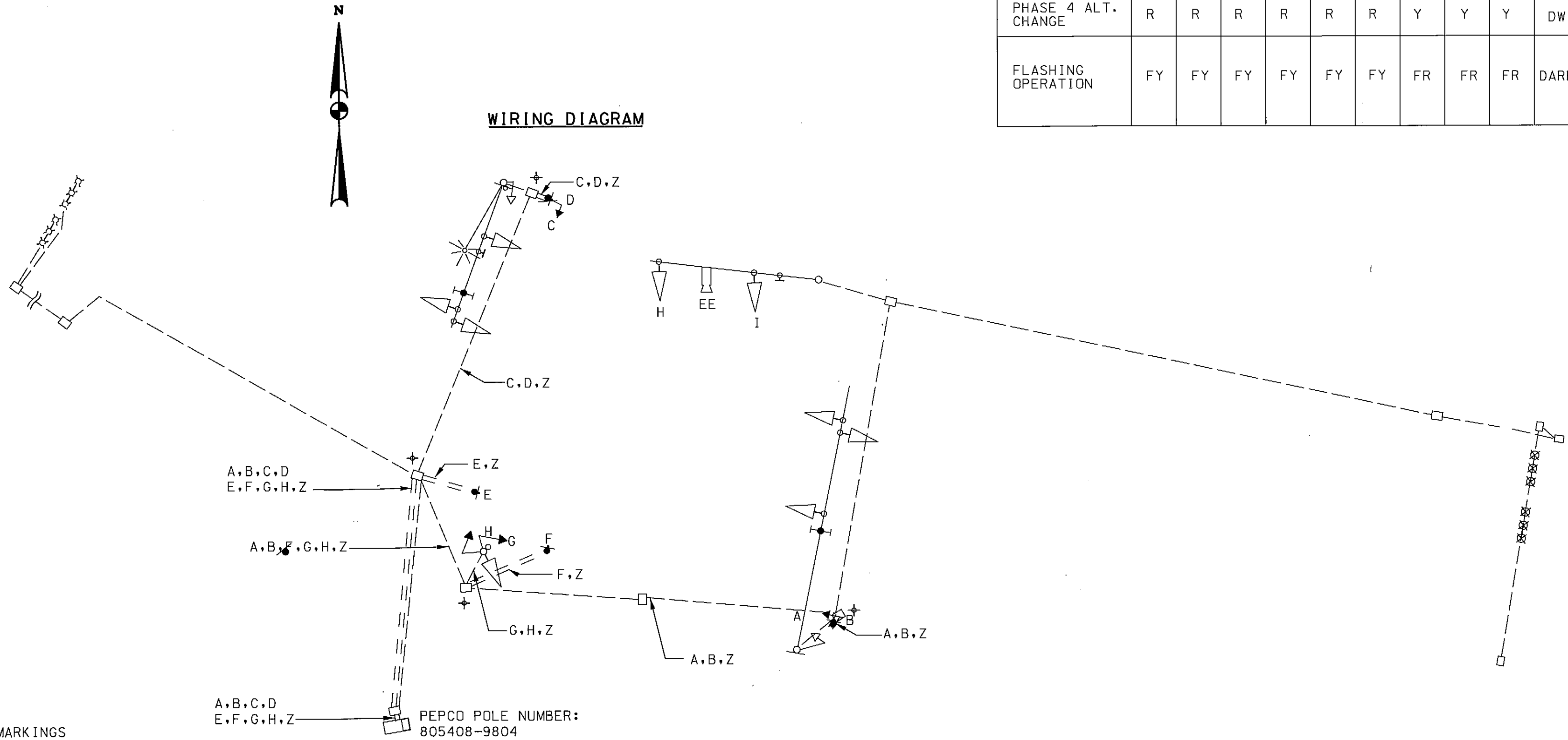
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

LINE NO. CAT CODE	ITEM NO./QUANTITY	DESCRIPTION
1001	114280 280 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH
1002	120500 1 LS	MAINTENANCE OF TRAFFIC
2002	203030 2 CY	TEST PIT EXCAVATION
5005	585412 200 LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
NEG	585625 80 LF	24 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
6005	655105 230 SF	5 INCH CONCRETE SIDEWALK
8001	800000 4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN
8002	800000 4 EA	BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	800000 1 EA	FURNISH AND INSTALL 2 WIRE CONTROL UNIT
8004	800000 4 EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8005	800000 4 EA	PEDESTRIAN EDUCATION SIGN
8007	800000 1 EA	REMOVE AND DISPOSE PER ASSIGNMENT
8010	801104 90 LF	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
8011	802145 2 EA	ADJUST EXISTING HANDHOLE
8012	802501 400 LF	NO.6 AWG STRANDED BARE COPPER GROUND WIRE
8013	805135 70 LF	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8015	813014 41 SF	INSTALL GROUND MOUNTED SIGNS
8018	837001 4 EA	GROUND ROD-3/4 INCH DIAMETER X 10 FOOT LENGTH
8020	861105 400 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	861107 550 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8024	805155 50 LF	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
NEG	813010 2 EA	BAND SIGN TO SIGN SUPPORT
NEG	813015 68 SF	INSTALL OVERHEAD SIGNS

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	
	(R) Y G 8"	(R) Y G 12"	(R) Y G 12"	(R) Y G 8"	(R) Y G 12"	(R) Y G 12"	(R) Y G 8"	(R) Y G 12"	(R) Y G 12"	(R) Y G 16"	(R) Y G 16"	(R) Y G 16"	(R) Y G 16"	
PHASE 2 & 6	G	G	G	G	G	G	R	R	R	WK	WK	DW	DW	
PEDESTRIAN CLEARANCE	G	G	G	G	G	G	R	R	R	FDW	FDW	DW	DW	
PHASE 2 & 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	DW	DW	DW	DW	
PHASE 4	R	R	R	R	R	R	G	G	G	DW	DW	DW	DW	
PHASE 4 CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	
PHASE 4 ALT.	R	R	R	R	R	R	G	G	G	DW	DW	WK	WK	
PEDESTRIAN CLEARANCE	R	R	R	R	R	R	G	G	G	DW	DW	FDW	FDW	
PHASE 4 ALT. CHANGE	R	R	R	R	R	R	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FY	FY	FY	FY	FY	FY	FR	FR	FR	DARK	DARK	DARK	DARK	

WIRING DIAGRAM



KEY

- A.C.G.H } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)  
B.D.E.F } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG.)  
Z } 1 CONDUCTOR (NO.6 AWG) STRANDED BARE COPPER GROUND WIRE  
+ } GROUNDED



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 501 (CHILLUM ROAD) AND 19TH AVENUE  
APS PUSHBUTTON INSTALLATION

GENERAL INFORMATION SHEET

SCALE NA ADVERTISED DATE 10/2010 CONTRACT NO. AX7035168

DESIGNED BY AMH/AF COUNTY PRINCE GEORGE'S  
DRAWN BY AF LOGMILE 16050101.02  
CHECKED BY JFL CSW TMS NO. K268  
F.A.P. NO. SEE TITLE SHEET TOD NO.

TS NO. 3537-C DRAWING **TS-2** OF 2 SHEET NO. 2 OF 2

**KCI** TECHNOLOGIES  
ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
936 RIDGEBROOK ROAD  
SPARKS, MARYLAND 21152  
TELEPHONE: (410) 316-7800  
FAX: (410) 316-7818